



Tennessee Green Star Partnership EMS Track



The Tennessee Green Star Partnership (TGSP) EMS Track seeks to recognize all organizations with an Environmental Management System (EMS) that are committed to sustainable practices throughout their process. The Partnership requires that EMS Track members examine their use of resources and take actions that reduce or eliminate that usage in a positive, sustainable way that will also lead to lower costs. The Partnership encourages members to mentor others, perform outreach in their communities, and purchase from other TGSP members.

TGSP EMS Track

- Designed for Tennessee organizations that are planning, developing, or implementing an Environmental Management System (EMS) similar to the ISO 14001 standard
- Identifies your organization as an environmental advocate and dedicated community leader





The Tennessee Green Star Partnership's EMS Track recognizes three levels of achievement:

One-Star Partners are planning an Environmental Management System (EMS) similar to the ISO 14001 standard.

<u>Two-Star Partners</u> are developing an Environmental Management System (EMS) that <u>has not been</u> independently assessed.

<u>Three-Star Partners</u> have implemented a fully-functioning EMS that has been independently assessed.

Candidates shall maintain a <u>Good Compliance Record</u> for the past two calendar years for One-Star and Two-Star levels and for the past three years for the Three-Star level.

Candidates may enter the partnership at any level, providing all of the requirements for that level are completed.

Candidates will complete the **EMS Track Checklist** to determine their level of achievement in the Partnership.

Candidates will notify the Office of Sustainable Practices to schedule an onsite **EMS Track Review** when their checklist is complete.

One-Star and Two-Star onsite **EMS Track Reviews** will be conducted <u>during the</u> months of April, May, and June.

Three-Star onsite **EMS Track Reviews** will be conducted <u>during the months of</u>, <u>August, September, and October.</u>





One-Star Level EMS Track Criteria

PREREQUISITES

Compliance:

The organization will meet all local, state, and federal environmental compliance related requirements as set forth in <u>Appendix A</u>.

Environmental Team

An environmental team is in place, made up of employees representing each major function of the organization, with an assigned EMS coordinator (also functions as the team leader).

Environmental Policy

A written environmental policy has been developed by the environmental team and approved by the organization's top management. This policy includes commitments for, but not limited to:

- Compliance with both environmental legal requirements and voluntary commitments that the facility/organization has made
- Prevention of pollution at its source whenever possible
- Continual improvements in environmental performance
- Sharing information with the community and the Partnership about the company's environmental performance and how the environmental management system (EMS) operates

COMMITMENTS

Creating a Baseline

The organization should document the types and amounts of wastes that it currently generates and the natural resources it consumes (e.g., energy, water, water discharges, air emissions, materials, etc.). This documentation can include data collected from items such as utility bills, waste and hazardous waste disposal records, purchasing records for consumable supplies and hazardous chemical inventories.





Evaluating the Environmental Aspects

Environmental aspects should be identified and prioritized according to significance. An aspect is any element of activities, products, or services that could have an impact on the environment. Each company decides which aspects are "significant." Organizations often base this decision on potential environmental impact, legal or self-imposed requirements, marketplace demand, community concerns, or cost-reduction opportunities.

Identifying Environmental Improvement Initiatives/Action Plans/Performance Commitments

From the list of environmental aspects, measurable objectives and targets should be identified, then Environmental Improvement Initiatives (also referred to as Action Plans or Performance Commitments in some EMS guidance) will be developed to improve performance in **two** significant environmental aspects. At least **one** Action Plan must be implemented with measureable pollution prevention results within three years or less.

Communicating with Employees

Organizations should display baseline information about the significant environmental aspect(s) the company will be tracking in the action plans in a central location in the facility.

Documenting Environmental Legal Requirements

Keep written documentation of environmental legal requirements at the federal, state or local levels, as well as other voluntary commitments. Develop procedures for keeping up with changes to these requirements, integrating the changes into the EMS and achieving and maintaining compliance with them.

Implementing Materials Management

Develop and implement a facility-wide comprehensive recycling/solid waste reduction program, if such a program is not already in place. At a minimum, this should include collection and recycling of aluminum, office paper, cardboard, glass, and plastic, and preferably to include reuse and/or recycling of any process-generated waste. Participation in EPA's WasteWise Partnership (WasteWise) is also strongly encouraged.





Training All Employees

Develop a program to train employees about the elements of the EMS and environmental legal requirements.

Reporting the Sustainability Metrics

Report to the Office of Sustainable Practices annually on environmental activities and commitments in the format provided by the Tennessee Green Star Partnership.

Members will use the downloadable P2 Greenhouse Gas Calculator and the P2 Cost Savings Calculator, located on the <u>EPA P2 Measurements Page</u>, to report pollution prevention or reduction metrics.

Metrics collected during the reporting period October 1, 20xx, (of the previous year) through September 30, 20xx, (of the current year) are due annually on **October 31**, **20xx**. Subsequent annual reporting will follow this schedule.





Two-Star Level EMS Track Criteria

One-Star Partners will have three years to complete the requirements and attain the Two-Star Partner level.

PREREQUISITES

- Organization meets all local, state, and federal environmental compliance related requirements as set forth in <u>Appendix A</u>
- Environmental team established
- Environmental policy developed and approved
- Baseline of wastes generated and resources used completed
- Comprehensive facility-wide recycling/solid waste reduction program in place
- Environmental aspects identified and prioritized for significance
- Environmental improvement initiatives documented for **two** significant aspects and implemented for one aspect
- Baseline and action plan posted in a central location in the facility/organization
- Environmental legal requirements managed
- Program to train all employees on EMS and requirements in place

COMMITMENTS

Fully Implementing the EMS

- Establish roles and responsibilities (assigning accountability) for implementation of EMS, including top management and employees
- Establish procedures for the following: communicating EMS/environmental performance information throughout the facility/organization and with the community; managing EMS documents; operating and maintaining equipment related to your environmental legal requirements and EMS objectives and targets
- Provide specific training for those directly responsibility for achieving environmental legal compliance and the EMS objectives and targets
- Integrate emergency preparedness into the EMS program
- Document the above roles, procedures, training and programs





Auditing the EMS and Taking Corrective Action

- Develop programs for assessing performance and preventing and detecting nonconformance with legal and other requirements of the EMS, including an established compliance audit program
- Develop a program for prompt, corrective action of any non-conformance with legal requirements and other EMS requirements
- Measure and monitor activities and processes
- Maintain calibration and maintenance records of monitoring activities

Performing a Management Review

Conduct and document a yearly management review of the performance and effectiveness of the EMS in meeting the policy commitments.

Continuing Environmental Improvement Initiatives/Action Plans Implement environmental improvement initiatives or action plans for at least two environmental aspects.

Purchasing Goods or Services from another Tennessee Green Star Partner
Purchasing from another TGS Partner can be an ongoing contract or a one-time event.

Performing Community Outreach

Develop procedures to identify and respond to community concerns relating to your operations, and implement **at least one** of the following environmental community outreach activities:

- Install an eV charging station that could be used for company, employee and general public vehicles.
- Support/participate in a community waste reduction, reuse, composting, recycling or cleanup program (e.g., Adopt-a-Stream, Rivers Alive, electronics recycling events, household hazardous waste collection events, etc.)
- Promote public environmental education activities (e.g., support school programs, facilitate or host environmental teacher training, make presentations in schools and community meetings, support local Keep America Beautiful affiliates, etc.)
- Participate on the board of a non-profit environmental organization
- Include all Community Outreach activities in the October 31st annual report





Expanding Materials Management

Choose and implement **at least one** of the following Materials Management activities (i.e., in addition to meeting the prerequisite for a facility-wide recycling program):

- Join EPAs WasteWise Partnership (WasteWise)
- Implement policies to reduce paper usage (e.g., printer defaults set to "duplex," efiles, etc.)
- Provide/expand recycling services to include employees and/or the community
- Reduce/eliminate product packaging where possible
- Start a food scraps and yard trimmings collection and composting program
- Become a "Mercury-Free" facility
- Reduce/eliminate use of priority chemicals
- Become a "Zero-Waste" facility
- Include all Materials Management activities in the October 31st annual report

Participating in Supply Chain/Environmentally Preferable Procurement Activities Implement at least one of the following supply chain or environmentally preferable procurement (EPP) activities:

- Begin or comprehensively expand an EPP purchasing program addressing core purchases (see EPA EPP Database for resources regarding EPP)
- Begin or comprehensively expand a pallet return/reuse program with suppliers/customers
- Incentivize suppliers to develop EMSs (e.g., make the implementation of an EMS a factor when evaluating supplier bids, or identify an existing supplier that is willing to implement an EMS and assist in that effort)
- Participate in U.S. EPA's Green Suppliers Network (Green Suppliers)
- Actively participate in U.S. EPA's SmartWay Transit Partnership (Smart Way)
- Reduce the impact of the vehicle fleet through the purchase of high efficiency vehicles and/or the use of alternative fuel
- Begin or comprehensively expand an employee commuter assistance program
- Include all Supply Chain/Environmentally Preferable Procurement activities in the October 31st annual report





Sustainability Activities

Implement at least one of the following sustainability activities:

- Conduct life cycle analyses for products purchased or manufactured
- Participate in established conservation programs (e.g., Wildlife Habitat Council, National Wildlife Federation's Backyard Habitat Program, U.S. Fish and Wildlife Service's Partners for Fish and Wildlife Program)
- Develop a relationship with/support a community revitalization program
- Use post-consumer feedstock (e.g., use post-consumer glass bottles to manufacture glass tiles)
- Utilize Brownfields and infill (e.g., use industrial sites instead of undeveloped land for new construction)
- Use green building standards when renovating or constructing new buildings (e.g. LEEDTM or SITES)
- Include all Sustainability activities in the October 31st annual report

Mentoring Activities

Mentor another company or companies in becoming a member or advancing in the Tennessee Green Star Partnership.

- Facilitate information or training sessions in the local community on TGSP, how to develop an EMS or some other aspect of sustainability within the program
- Actively recruiting a company into TGSP
- Include all Mentoring activities in the October 31st annual report

Mentor a local K-12 school or school system

- Facilitate environmental teacher training in such programs as Project WET, Project WILD, or Project Learning Tree
- Assist in the procurement of environmental curriculum materials for a school, school cluster or school system
- Coordinate with PTO to host a "Green Chat" with parents.
- Conduct environmental "walk through" or audits for energy use, water conservation, waste, and recycling assessments, etc.
- Provide volunteer labor and materials to build outdoor classroom amenities such as a school garden, amphitheater, arboretum, butterfly garden, bird feeders, baths, bird nesting boxes and bird blinds for observation, compost piles, worm composting areas, native grass, tree or wildflower plantings, rain gardens and rain barrels, a weather station, etc.
- Host an environmental career fair.





• Assist students in conducting "citizen science" research projects.

Reporting the Sustainability Metrics

Report to the Office of Sustainable Practices annually on environmental activities and commitments in the format provided by the Tennessee Green Star Partnership.

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Three Star Level EMS Track Criteria

Two-Star Partners will have three years to complete the requirements and attain the Three-Star Partner level.

PREREQUISITES

Policy & Planning

- Organization meets all local, state and federal environmental compliance related requirements as set forth in <u>Appendix A</u>
- Environmental team established
- Environmental policy developed and approved
- Baseline of wastes generated and resources used completed
- Comprehensive facility-wide recycling/solid waste reduction program in place
- Environmental aspects identified and prioritized for significance
- Action plans documented for **two** significant environmental aspects
- Baseline and action plan posted in a central location in the facility/organization
- Environmental legal requirements managed
- Program to train all employees on EMS and requirements in place

Implementation & Operation

- Roles, responsibilities, accountability relating to the EMS are defined
- Procedures in place for the following as they relate to the EMS: training, communication, document management, achieving objectives and targets, incentives for employee participation and emergency preparedness
- All roles, procedures, training, and programs relating to the EMS are documented

Checking & Corrective Action

- Programs in place for assessing performance and preventing and detecting nonconformance with legal and other requirements of the EMS, including compliance audit and yearly EMS audit programs
- Program in place for prompt, corrective action of any non-conformance with legal requirements and other EMS requirements
- Activities, processes, and equipment relating to the EMS are measured, monitored and recorded





Management Review

A documented management review of the EMS has been conducted in the past year.

Independent Assessment

A documented independent assessment of the EMS has been conducted.

Completing and Continuing Environmental Improvement Initiatives

Achieved and documented results for **at least two** environmental aspects with planned environmental improvement initiatives.

Community Outreach

Conducted and documented **at least one** environmental community outreach activity approved by the Office of Sustainable Practices.

Materials Management

Conducted and documented **at least one** materials management activity in addition to meeting the prerequisite for a facility-wide recycling program.

COMMITMENTS

As a Three Star Partner, agree to continually improve the EMS and act as a mentor and environmental leader in Tennessee by committing to the following (for examples in each category, refer back to the Two Star Partner criteria):

Expanding Environmental Improvement Initiatives/Action Plans

Implement **two new** action plans. Reduce the impact for these additional environmental aspects.

Community Outreach

Develop procedures to identify and respond to community concerns relating to your operations, and implement **at least one additional** environmental community outreach activity (total of two).

Materials Management

Choose and implement at least one additional Materials Management activity (total of two).

Purchasing Goods or Services from another Tennessee Green Star Partner
Purchasing from another TGS Partner can be an ongoing contract or a one-time event.

Supply Chain/Environmentally Preferable Procurement Activities Implement at least one additional supply chain or environmentally preferable procurement (EPP) activity (total of two).





Sustainability Activities

Implement at least one additional sustainability activity (total of two).

Mentoring Activities

Become a mentor to others by completing **at least one additional** mentoring activity (total of two).

- Mentor other organizations on how to successfully implement Partnership activities or specific pollution prevention practices
- Encourage suppliers to participate in U.S. EPA's Green Suppliers Network (<u>Green Suppliers</u>)
- Offer guided tours of your facility to Partners
- Conduct a third party EMS audit or gap analysis for another Partner
- Include all Mentoring activities in the October 31st annual report

Report the Sustainability Metrics

Report to the Office of Sustainable Practices annually on environmental activities and commitments in the format provided by the Tennessee Green Star Partnership.

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APPENDIX A

Compliance-Related Requirements

An organization may not be eligible to participate in the program if there has been a pattern of regulatory or permit violations, notices of violation, civil penalties, and/or criminal penalties and significant compliance advisories (or informal enforcement actions) that indicate a lack of commitment to environmental leadership.

There can be no evidence of any serious violations of applicable local, state and federal environmental laws and permits for the past two calendar years for One-Star and Two-Star candidates or for the past three years for Three-Star candidates immediately prior to the date of submission of the application for participation in the program.

There can be no conviction of applicable local, state and federal environmental laws or out-of-court settlements of formal charges of criminal violations within the past five calendar years for all Tennessee Green Star Partner levels before filing the application.

There can be no settlement agreement entered into and no compliance or consent order issued for serious violations of local, state and federal environmental laws and permits for the past five calendar years immediately prior to the date of submission of the application for participation in the program.

Any organization that applies for the program and is part of a corporation, partnership, sole proprietorship, municipality, county, city and county, special district, or state or federal agency or department that has other Tennessee facilities may not be eligible for the program unless all of the said Tennessee facilities are in compliance with applicable local, state and federal environmental laws and regulations. This provision will be looked at on a case-by-case basis.

If at any time during membership, a Partner should incur a serious environmental violation, the Partner would be subject to suspension or termination from the program. Suspensions and terminations would be determined by a review panel assembled by the Office of Sustainable Practices. Depending on the violation, the Partner could be reinstated, but the review panel would examine any reinstatement on a case-by-case basis.





Definitions and Resources

Environmental Management System (EMS)

An environmental management system, or EMS, is the vital foundation of the TGSP EMS Track. The EMS should include some form of the "Plan-Do-Check-Act" methodology (also known as the continuous improvement cycle), which is described in detail in the ISO 14001 standard. Any potential Green Star Partner should begin with evaluation of their environmental aspects and then create action plans to minimize or eliminate the impacts of those aspects. Some examples of environmental aspects include chemical use, energy use, water use, solid or hazardous waste generation and wastewater generation. For further reading and training about a basic EMS program, please visit EPA EMS 101.

Environmental Improvement Initiatives

Environmental Improvement Initiatives, including, but not necessarily limited to, the following categories:

- Air Quality
- Energy Use (conservation, renewables, etc.)
- Land Use and Habitat
- Sustainable Materials Management
- Water Conservation
- Water Quality